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66th Annual Scientific Session & Expo

UPDATE IN BEST PRACTICES IN MEDICAL EDUCATION

Kathryn Berlacher, MD, MS, FACC
University of Pittsburgh Medical Center

WASHINGTON, DC

FRI • SAT • SUN

MARCH 17 – 19, 2017





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66th Annual Scientific Session & Expo

UPDATE IN ~~BEST PRACTICES IN~~ ~~MEDICAL EDUCATION~~

Things I want to do... But don't have time for!

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~~UPDATE IN BEST PRACTICES IN MEDICAL EDUCATION~~

What Hot (and practical) in Med Ed Now

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Learning Objectives

- In 20 minutes you will be able to:
 - Define “best practices” in medical education and name one theory upon which they are built
 - Name 2 recent best practices of medical education
 - Identify one new way you can stay up to date on these best practices

What is a 'Best Practice'?



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A technique or methodology that, through experience and research, has proven to reliably lead to a desired result.

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BEST PRACTICES CENTER



Introduction Letter Welcome to the Best Practices Center! View the Introduction from the Get With The Guidelines Chair.



Introduction By offering best practices in an easy-to-use format, we hope to help Get With The Guidelines hospitals overcome barriers to delivering the quality care they strive to provide heart failure and stroke patients.



Overview This site is for both new Get With The Guidelines® users and existing users who want to sustain and enrich the quality



AMERICAN COLLEGE of CARDIOLOGY

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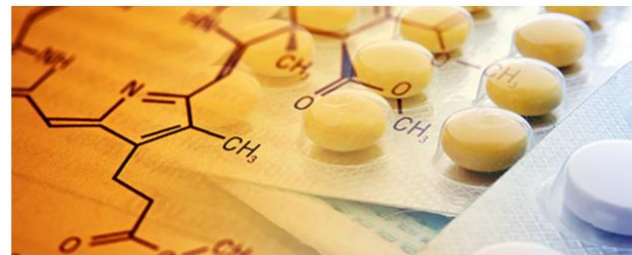
Heart Songs

Meeting on Demand Programs

2016 Recent Advances in Clinical Nuclear Cardiology and Cardiac CT MOD™

iScience

Board Prep Offerings



Welcome to Guideline Education, please click on a guideline topic below to find CME, CE and MOC educational activities.

Acute Coronary Syndromes

Atrial Fibrillation

Heart Failure

Prevention

Stable Ischemic Heart Disease

Supraventricular Tachycardia

Valvular Heart Disease

Vascular Heart Disease

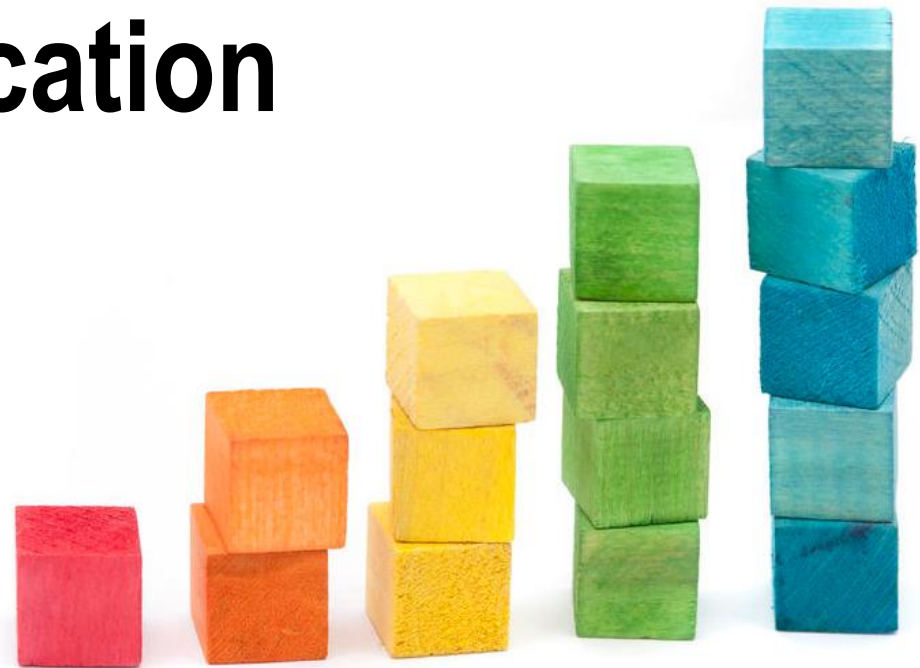


“A technique or methodology that, through experience and research, has proven to reliably lead to a desired result...”

Does that definition fit medical education?



Upon what is medical education built?



Knowles' Principles of Andragogy



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SELF DIRECTION

Adults want a say in the learning process



IMMEDIATELY APPLICABLE

Adults don't learn something because it might be useful in the future



EXPERIENTIAL

No sitting around listening to lectures



REAL LIFE

It is very hard to remember "stuff" without real-life application





Role of Teacher in Andragogy

“Teacher” (Resident, Attending, PD, Course Director)

- is NOT the owner or provider of knowledge
- IS the facilitator of knowledge



Learner stage should not be ignored!

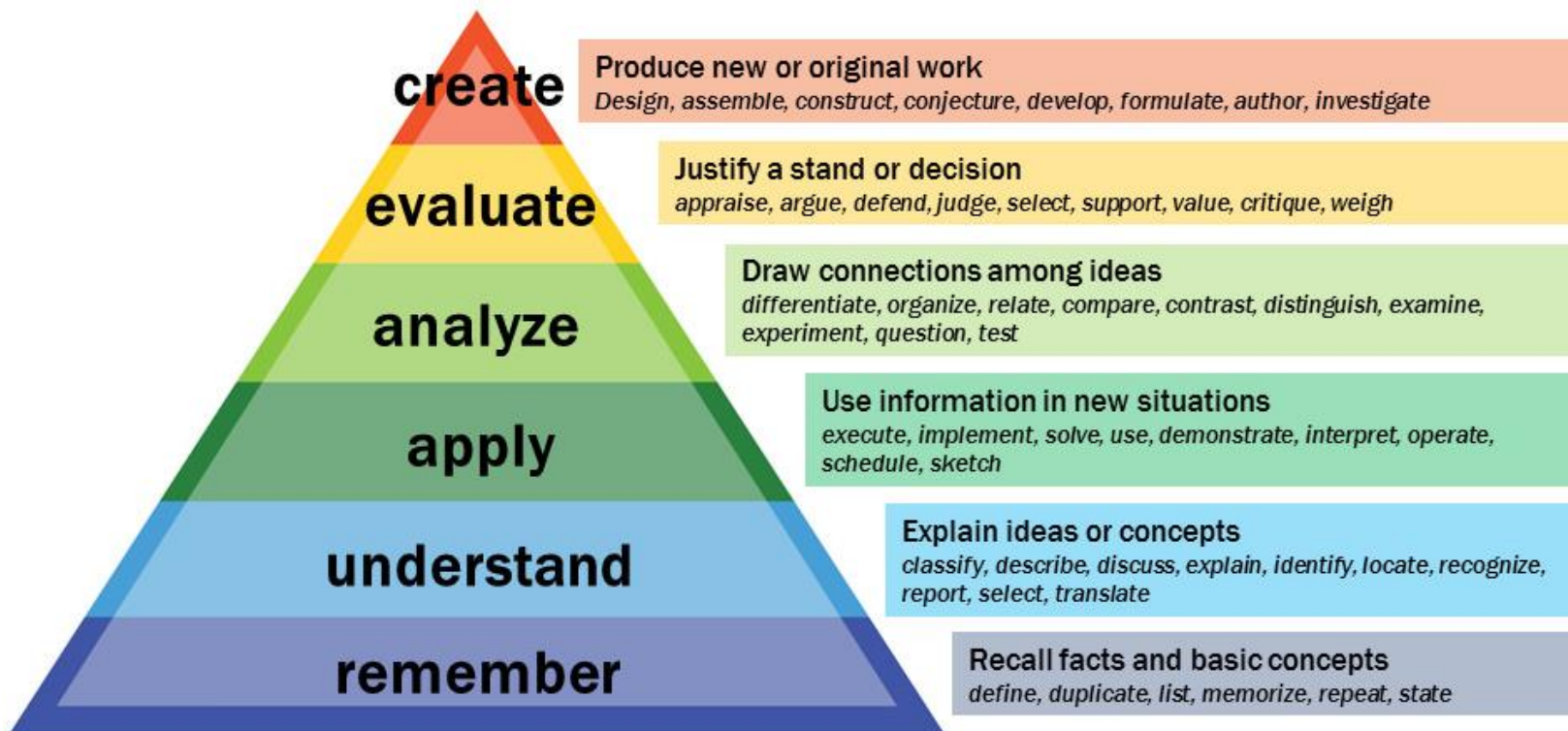


		Teacher styles			
		Authority, expert	Salesperson, motivator	Facilitator	Delegator
Learner stages	Dependent learner	Match	Near match	Mismatch	Severe mismatch
	Interested learner	Near match	Match	Near match	Mismatch
	Involved learner	Mismatch	Near match	Match	Near match
	Self directed learner	Severe mismatch	Mismatch	Near match	Match

Bloom's Taxonomy



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Vanderbilt University Center for Teaching

Image source: www.cft.vanderbilt.edu



Best Practice in Medical Education:

a commitment to using the knowledge, methodology and technology at one's disposal to ensure success in medical training.



Good News...

You are probably already doing some best practices!

- Sending your team an article based on a patient you saw together that day
- Case Based Conferences
- Competency Based Evaluations



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I know how to define best practice in medical education.

GIVE ME AN UPDATE!!

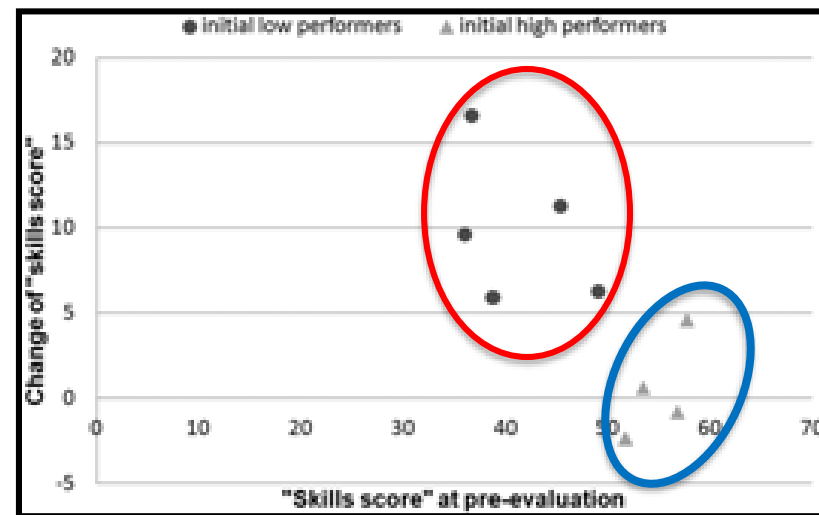


What's Hot Now?

- Interactive teaching and learning
 - How and when to use simulation
 - Inclusion in procedural training
- Burnout
 - Prevalence and identification
 - Prevention and treatment



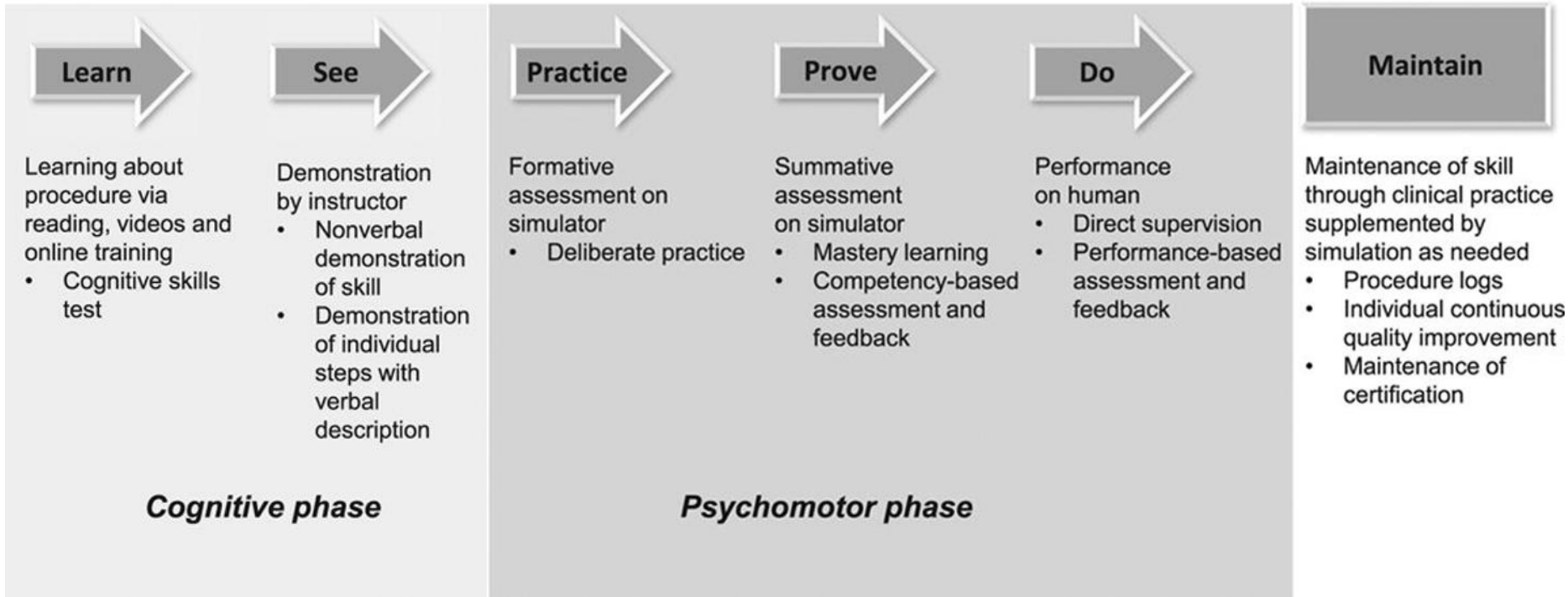
Does Simulation-Based Training Improve Procedural Skills of Beginners in Interventional Cardiology?—A Stratified Randomized Study



A new framework for teaching procedures?



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Burnout Among U.S. Career Physicians

Dyrbye, Liselotte N. MD, MHPE;
Sloan, Jeff PhD; Shanafelt, Tait

Characteristic	Residents/ fellows, ages 27–40 (n = 1,489)	Population, college graduates, ages 27–40 (n = 992)	P value
Burnout index, no. (%)*			
Emotional exhaustion: high score	557 (37.6)	260 (26.4)	<.0001
Depersonalization: high score	528 (35.7)	164 (16.6)	<.0001
Burned out [†]	739 (50.0)	310 (31.4)	<.0001
Screened positive for depression, no. (%)	753 (50.7)	406 (41.1)	<.0001
Suicidal ideation in the last 12 months, no. (%)	120 (8.1)	86 (8.7)	.58
Quality of life, mean (standard deviation)			
Overall	6.8 (2.0)	7.0 (1.9)	<.01
Mental	6.5 (2.1)	6.8 (2.0)	<.001
Physical	5.7 (2.2)	6.5 (2.0)	<.0001
Emotional	6.3 (2.2)	6.6 (2.1)	<.0001
Fatigue, mean (standard deviation)	4.9 (2.4)	5.7 (2.2)	<.0001

MD;



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Www.ACGME.org/What-We-Do/Initiatives/Physician-Well-Being



Accreditation Council for
Graduate Medical Education

[Accreditation Data System \(ADS\)](#)

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[Resident Case Log System](#)

What We Do	Designated Institutional Officials	Program Directors and Coordinators	Residents and Fellows	Meetings and Events	Data Collection Systems	Specialties
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[Home](#) > [What We Do](#) > [Initiatives](#) > [Physician Well-Being](#)

Physician Well-Being

The ACGME is committed to addressing physician well-being for individuals and as it relates to the clinical learning environment. The creation of a learning environment with a culture of respect and accountability for physician well-being is crucial to the ability of those working in it to deliver the safest, best possible care to patients. The ACGME is focusing on five key areas to support its ongoing commitment to physician well-being: Resources, Education, Influence, Research, and Collaboration.

Read CEO Thomas J. Nasca's recent Letter to the Community

"We need to protect the workforce that protects our patients."

— Tim Brigham, MDiv, PhD

Senior Vice President, Education

Read more [An Interview with Dr. Brigham about the ACGME's commitment to improving physician well-being.](#)

[Dr. Brigham Interview](#)

[Resources](#)

[Education](#)

[Influence](#)

[Research](#)

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[Symposium](#)

Are these Med Ed?

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SURVEY REPORT

ACC 2009 Survey Results and Recommendations: Addressing the Cardiology Workforce Crisis

A Report of the ACC Board of Trustees Workforce Task Force

Work Activities and Compensation of Male and Female Cardiologists

Reshma Jagsi, MD, DPHIL,^a Cathie Biga, RN,^b Athena Poppas, MD,^c George P. Rodgers, MD,^d Mary N. Walsl Patrick J. White, MPH,^e Colleen McKendry, MSTAT,^f Joseph Sasson, PhD,^f Phillip J. Schulte, PhD,^g Pamela S. Dou,

ACC Board of Trustees Workforce Task Force

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Mary Norine Walsh, MD, FACC
Eric S. Williams, MD, FACC
Jeffrey L. Williams, MD, MS, FACC

ABSTRACT

BACKGROUND Much remains unknown about experiences, including working activities and pay, of women in cardiology, which is a predominantly male specialty.

OBJECTIVES The goal of this study was to describe the working activities and pay of female cardiologists compared with their male colleagues and to determine whether sex differences in compensation exist after accounting for differences in work activities and other characteristics.

METHODS The personal, job, and practice characteristics of a national sample of practicing cardiologists were described according to sex. We applied the Peters-Belson technique and multivariate regression analysis to evaluate whether gender differences in compensation existed after accounting for differences in other measured characteristics. The study used 2013 data reported by practice administrators to MedAxiom, a subscription-based service provider to cardiology practices. Data regarding cardiologists from 161 U.S. practices were included, and the study sample included 2,679 subjects (229 women and 2,450 men).

RESULTS Women were more likely to be specialized in general/noninvasive cardiology (53.1% vs. 28.2%), and a lower proportion (11.4% vs. 39.3%) reported an interventional subspecialty compared with men. Job characteristics that differed according to sex included the proportion working full-time (79.9% vs. 90.9%; $p < 0.001$), the mean number of

AHA Scientific Statement

Evolution of Critical Care Cardiology: Transformation of the Cardiovascular Intensive Care Unit and the Emerging Need for New Medical Staffing and Training Models | A Scientific Statement From the American Heart Association

David A. Morrow, MD, MPH, FAHA, Chair; James C. Fang, MD, FAHA; Dan J. Fintel, MD; Christopher B. Granger, MD, FAHA; Jason N. Katz, MD, MHS; Frederick G. Kushner, MD, FAHA; Jeffrey T. Kuvin, MD; Jose Lopez-Sendon, MD; Dorothea McAreevey, MD; Brahmajee Nallamothu, MD, MPH, FAHA; Robert Lee Page II, PharmD, MSPH, FAHA; Joseph E. Parrillo, MD; Pamela N. Peterson, MD, MSPH, FAHA; Chris Winkelman, RN, PhD; on behalf of the American Heart Association Council on Cardiopulmonary, Critical Care, Perioperative and Resuscitation, Council on Clinical Cardiology, Council on Cardiovascular Nursing, and Council on Quality of Care and Outcomes Research

Critical care, defined as the diagnosis and management of life-threatening conditions that require close or constant attention by a group of specially trained health professionals, is inherent to the practice of cardiovascular medicine. The

indicated that outcomes are better when critical care is provided by specially trained providers in a dedicated intensive care unit (ICU).⁶⁻⁹ In the context of this evolution, provision of optimal care in the contemporary cardiac ICU



I can name two current best practices in medical education.

WHAT'S COMING NEXT???





What May Be Hot...

- Multimodal delivery of content and learning
 - Social media, podcasts, video conferencing, screencasts
- Simulation implementation and medical gaming
- Grit and resiliency
- Health care advocacy, diversity, social justice



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Circulation *on the Run*



JAMA

EDITOR'S AUDIO SUMMARY

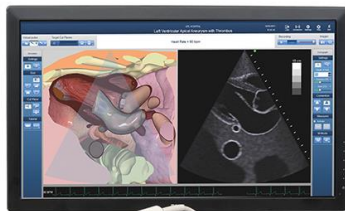


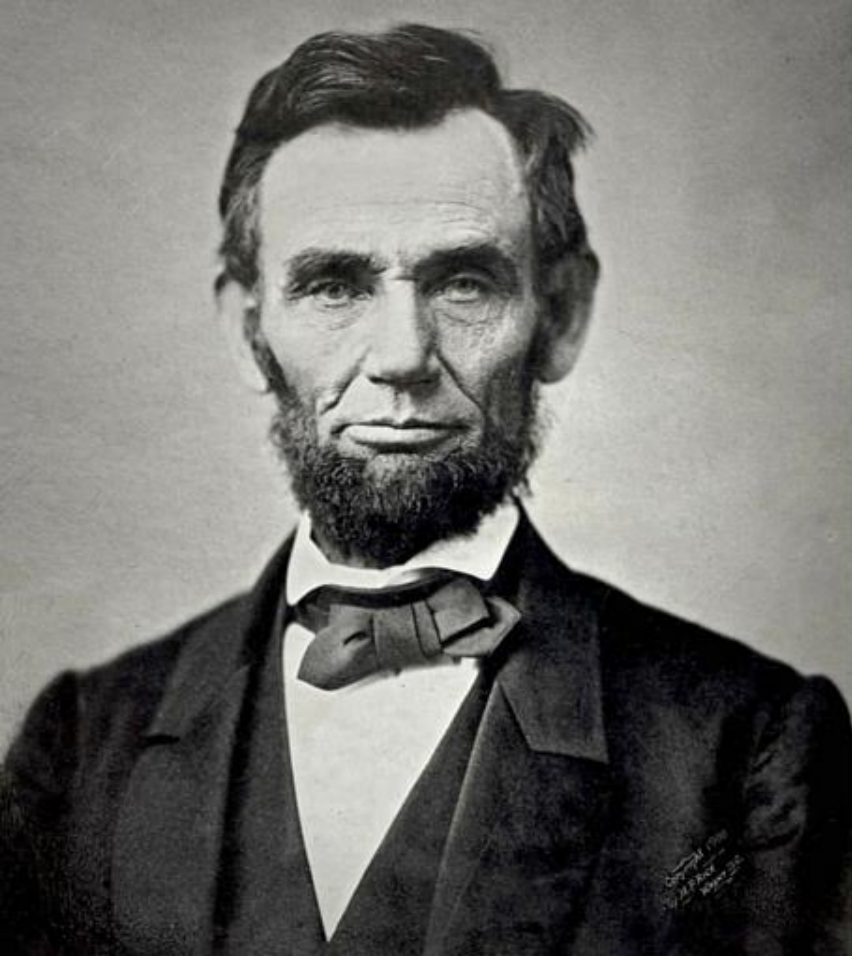
ANGELA

Medical students in Syracuse combine for video to blast Trump...



Medical students in Syracuse combine for video to blast Trump policies





THE BEST WAY TO
PREDICT THE FUTURE IS
TO CREATE IT.

- ABRAHAM LINCOLN



Hmmm. That seems like a lot to keep up with.

HOW CAN I STAY HOT?



How to Stay Hot

- Get involved
 - ACC, ACGME, APDIM, GME
- Expand your horizons
 - Read one med ed journal article per month
- Use social media
 - Twitter, search for #meded, follow people in this room!
- Listen to podcasts
 - Keylime, The Teaching Course, Emcrit
- Delegate!!
 - Use APDs, faculty, fellows, journal clubs



Best Practices in Medical Education

- **Define it:** *the use of knowledge and methods based on adult learning principles to achieve success in training a diverse and evolving medical workforce*
- **Give 2 examples:** *simulation integration, burnout identification*
 - BONUS – Blended learning, gaming, grit, advocacy
- **Name one way to stay uptodate:** *network, explore, delegate*



Resources



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- www.bmj.com; www.heart.org; www.acc.org
- www.elearningindustry.com/the-adult-learning-theory-andragogy-of-malcolm-knowles
- <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>
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